

## CHAPTER 5: NETWORK AND POLICY RECOMMENDATIONS

This chapter presents the policy recommendations of this Plan. These recommendations are aimed at creating an interconnected network of greenways and bikeways so that people have the convenient and safe option of walking and bicycling for recreation and transportation.

These recommendations are fully supported by the County's Comprehensive Plan, which states in Chapter 10 that "bike and pedestrian trails should be developed to serve as transportation systems within service districts and between housing nodes and community centers."

Now is a critical time for Fauquier County to prepare for growth in its Service Districts, and to learn from the mistakes of other Virginia counties that were less prepared for this type of growth. Other jurisdictions are dominated by automobile traffic, and face a daunting task of retrofitting their suburban areas to enable people to walk and bicycle. This is an expensive solution that could have been avoided if streets, residential and commercial developments had been built correctly the first time.



*The key to success in Fauquier County lies in having a strategic plan that is supported by design guidelines, ordinances and other regulations necessary to steer community design and roadway construction.*

**ACTION 1: Establish a network of multi-use trails, greenways, blueways, sidewalks and bikeway connections that link neighborhoods to each other and to other destinations throughout the County, as well as to neighboring jurisdictions.**

**Recommendation 1A:** Ensure that new developments (both commercial and residential) are safe for walking and bicycling, and that the greenways and bikeways identified in this Plan (and in Service District plans) are constructed during development projects. Ensure that new developments that are adjacent to the proposed network provide a trail and/or sidewalk connection to the master trails network.

**Recommendation 1B:** Eliminate gaps in the trails network in locations where previously existing development does not include trails. Institute a cooperative effort between homeowners

associations and the County to utilize the existing open space to accomplish this.

A current problem in the County is that the trails network is not connected, therefore Recommendations 1A and 1B speak to the need to build the new network and to eliminate gaps. There is a great need to build trails that link neighborhoods to each other so that travel can occur more easily between communities. County and municipal staff should require future developers to construct trails and greenways as identified in this Plan and Service District Plans, and should require that these corridors are dedicated to the County for public use. County and municipal staff should also facilitate projects that eliminate gaps in the network.

The proposed route network for Fauquier County is identified by the series of maps inside the back cover of this Plan. The locations of the proposed trails were developed through a citizen-driven process in each Service District which relied heavily on public input to determine the most appropriate locations for future trails. The Service District planning process supplied information in adequate detail to determine the exact locations (within the Service Districts) of future trails. In most cases, the proposed trail network extends along stream valleys and floodplain areas that can't be developed, through larger tracks of land that will at some point be developed, along roadways, and utility corridors. Utilizing the proposed plans within each Service District will tie together the fabric of that area, while providing easier access to the amenities located in that Service District.

It is important to note that future revisions to this Plan will be necessary in order to facilitate a more in depth discussion regarding trail connections *between* of the Service Districts.

In developing this network, the County will work cooperatively with landowners in order to address their concerns, and does not propose to condemn land in order to build this network. The majority of trail development will take place in the normal build-out of the Service Districts. Approximately 100 miles of trails are proposed to be built in the Service Districts.

In the layout of the maps a hierarchy for trail projects was developed:

- Planned Trail- Phase 1-Immediate -----O-----
- Acquired Trail- Development Pending -----X-----
- Existing Trail  
(HOA, State, Federal, or Privately Maintained) - - - - -
- Existing Trail  
(Parks & Recreation Maintained) \_\_\_\_\_

Within the Service Districts, trail lines shown are exact locations. Any proposed changes will need to be renegotiated with Parks and Recreation prior to change. Properties being developed adjacent to the trail will need to provide a connector from proposed development. Exact location of this connector can be negotiated with Parks and Recreation.

Except in rare circumstances, all trails should be built outside of the 10-year floodplain. All trails that are built to conform to this Plan will be dedicated by the developer to the County for public use. All trails that will convey to the County will be 10' wide asphalt trails. Internal subdivision trails may be 8' in width unless otherwise discussed with the Parks and Recreation Department.

The following figures provide the number of miles of trails that are proposed in each Service District:

- Catlett                6.7 miles
- Calverton            8.2 miles
- Midland              6.4 miles
- Bealeton             20.4 miles
- Remington          8.1 miles
- Opal                  4.4 miles
- Warrenton          33.8 miles
- New Baltimore    42.1 miles
- Marshall             9.6 miles

TOTAL= 139.7 MILES\*

\*Please note: All trail mileage is approximate and may vary from the exact mileage calculated in the field.

As described previously, the development of the route network relied heavily on public participation (through the Service District planning process). Fieldwork was also conducted to verify public comments on various routes in the network. A number of criteria were used in the route network development. The routes indicated on the network map:

- Provide direct access between destinations
- Provide access to popular recreational riding
- Provide access to scenic open space areas such as greenways, parks, and rails-to-trails projects, and areas popular for mountain biking
- Provide access to historical sites
- Provide access to requested functional (commuting) ends such as libraries, shopping, and work locations

**Recommendation 1C: The County should adopt any available standards of the Parks and Recreation Department for multi-use trails, sidewalks, bikeways, blueways, etc., develop new standards as needed, and revise local subdivision ordinances and roadway design standards accordingly.**

At the present time, multi-use trails are supported in the language of the Comprehensive Plan but are not adequately supported by the detailed regulations that control development within the County. *As a result, there is little practical guidance on how to design trails and bikeways.*

The Fauquier County Connections Plan provides “Best Practices” design standards and guidelines to aid in implementing a high quality countywide trail system (see Appendix B). All recommendations are based on accepted state and national standards developed by the Virginia Department of Transportation (VDOT), American Association of State Highway Transportation Officials (AASHTO) and other sources.

Trails will be installed using a combination of Developer, County, VDOT, and private groups.

The Fauquier County standard as taken from the AASHTO’s guidebook states that under most conditions, a recommended paved width for a two-directional multi-use trail is 10 feet. In addition, all trails *shall* have shoulders with a minimum width of 5 feet. Trails coming from adjacent private property connecting to the main trail shall be a minimum of 6’ wide with a 5’ safety buffer on either side. All trails will be constructed of a minimum base of 6” of stone with 2.5 inches of asphalt as recommended in the VDOT Material Specification manual.

Generally, trails adjacent to roadways are not recommended in areas with frequent driveways, side streets, or other trail crossings. The level of danger to the trail user increases with each trail crossing.

The following additional guidelines represent the recommended minimum design standards and support for Fauquier County trails.

1. Multi use trails and approaches should be on flat surfaces with adequate sight distance in each direction.

2. Landscaping should generally be native vegetation that requires minimal maintenance and irrigation.
3. Barriers at trail entrances should be clearly marked with reflectors and should be ADA accessible (minimum 5 feet clearance)
4. Multi-use trail construction should take into account impacts of maintenance and emergency vehicles on shoulders and vertical requirements.
5. Trails will be constructed *outside* of the 5 year flood as established by current FEMA maps.
6. If not covered specifically in this document, the AASHTO guidebook shall be consulted for specific design information.

Fauquier County's Subdivision Ordinance has a mixture of good provisions for pedestrians and bicyclists, as well as a number of factors that have been overlooked and are in need of revision. Town ordinances are generally less prescriptive and are not as strong in their requirements for pedestrian and bicycle facilities.

All subdivision ordinances in the County should be revised as described below. In addition, roadway design standards in the County should incorporate these principles.

▪ **Mixed uses and densities**

More nuanced requirements are needed with respect to mixes of uses and densities, with the goal of providing services in close proximity to residences so that walking and bicycling are viable. Most of the development that occurs in Service Districts is piecemeal (50 acres or less), therefore this will require more "hands on" guidance from local planners to ensure adjacent developments are connected to each other via streets and trails.

The goal should be to require walkable subdivisions where origins and destinations (including recreation facilities, schools, shopping and community services) are within walking distance - .25 miles - of each other. This level of density and mixed use should be a requirement, rather than an exception.

▪ **Provision of multi-use trails**

The pedestrian trails section of Fauquier County's Subdivision Ordinance (FCSO) should be updated. This section should address the need for *multi-use trails* (rather than pedestrian trails) in all subdivision developments as deemed necessary by the Parks and Recreation Department, and should require the developer to identify sensitive ecological areas (such as floodplains) that should be protected with greenway easements. Multi-use trails should be built to connect homes with nearby destinations, and should be

**Definition of a Multi-Use Trail:**

*Multi-use trails are separated from motorized vehicular traffic by an open space or barrier and located either within the highway right-of-way (often termed "parallel shared use path") or within an independent right-of-way. Trails may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. In some cases, shared use paths also accommodate equestrians.*

**Definition of a Sidewalk:**

*That portion of a highway, road or street specifically constructed for the use of pedestrians on the outside edge of the vehicular travel way. Sidewalks are typically, but not always, curb-separated from the roadway and made of concrete, brick, asphalt or another hard surface materials.*

designed to facilitate convenient access to nearby destinations such as parks, schools, shopping areas, and adjacent subdivisions. These multi-use trails will be evaluated by the Parks and Recreation Department on a case-by-case basis.

Each commercial and residential development should be required to submit a pedestrian and bicycle circulation plan, which should identify main trails and connector trails as well as sidewalks and on-road bikeways. Main trails should be a minimum of 10' in width and constructed of either asphalt or concrete. Connector trails may be reduced to 8' in width.<sup>1</sup> (The current ordinance allows for a 4' wide trail, which is far too narrow). Standard trail cross sections should be provided in the Subdivision Ordinance (Section 17) as well as in the Roadway Design Standards manual.

Finally, it is important that developers who build trails as part of the County's network meet the standards described herein, and dedicate these multi-use trails to the County for general public access, so that they become a part of the county-wide network rather than only serving the residents of that particular subdivision.

All trails shown on maps accompanying this document will be owned and maintained by Fauquier County. For reasons of liability, connectivity, and proper maintenance assurances these trails are best addressed using this ownership approach.

- **Provision of bicycle facilities (on-road)**  
Subdivision ordinances should require 5-foot wide bike lanes (in urban/suburban areas) and 4' wide paved shoulders (rural roadways) on both sides of all roadways that exceed 1500 vehicles per day. For roads that are projected to carry higher volumes, bike lane and shoulder widths should be increased (see Appendix B for further details.)
- **Provision of sidewalks**  
Current sidewalk requirements in both the Fauquier County and Town of Warrenton ordinances are insufficient and should be strengthened. Currently, county subdivisions with lots over .46 acres are not required to provide sidewalks on local streets - a significant issue since many Service Districts have R-1 zoning. **These ordinances should be revised to require sidewalks on both sides of all roadways built in Service District areas and within Town boundaries, including local streets, collectors and thoroughfares.** This provision is in sync with requirements in other Virginia counties.

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<sup>1</sup> These widths are necessary for several reasons: 1) they are required by national standards, as well as VDOT standards for shared use trails; 2) because the edges of asphalt trails tend to deteriorate over time, resulting in a narrower trail; and 3) because other communities have found that narrow neighborhood trails create conflicts between users and as a result their utility is greatly diminished.

In addition, the ordinance should require that sidewalks be a minimum of 5' in width.

Further recommendations with regards to sidewalk provisions in County and local ordinances is provided in Appendix C.<sup>2</sup>

- **Bike parking**

The County should adopt a bike parking ordinance that requires private developers to provide bike parking at destinations. Bike parking ordinances have been adopted by communities throughout the U.S. – and excellent resource for a model bike parking ordinance is the Association of Pedestrian and Bicycle Professionals' *Bicycle Parking Guidelines*, which can be accessed at [www.bicyclinginfo.org](http://www.bicyclinginfo.org).

The Parks and Recreation Department should also investigate the possibility of installing bike storage lockers at commuter lots as a revenue-generating feature. Bike lockers provide long term, secure bike parking, and are usually made available through long-term rentals (i.e. 3 to 6 months).



## **Action 2: Establish and strengthen mechanisms by which open space and greenway lands are preserved and protected in Fauquier County.**

Private landowners in Fauquier County should be invited to participate in the greenway program primarily through voluntary measures and incentives, many of which already exist through the Purchase of Development Rights (PDR) program, conservation easements, and agricultural districts.

Rising development pressures on small landowners present a serious threat to preserving greenway lands in the County, because landowners with less than 50 acres of land are not eligible for many of the existing preservation programs. There are some good reasons for this – small parcels usually cost more per acre, making it more cost effective to concentrate on preserving large parcels. In order to protect the greenway network, however, there must be opportunities for landowners of all different sizes to participate.

**Recommendation 2A: Provide user-friendly information for citizens and developers, publicize incentives to preserving greenways and open space.**

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<sup>2</sup> The Community Development Department will be responsible for preparing code revisions and ultimately enforcing many of the sidewalk and on-road bikeway requirements in this Plan.

Some landowners fail to participate in land preservation programs because they are not aware of the tax benefits. It can be difficult to navigate through the myriad of programs and requirements to determine which is the best option for a landowner's given situation. To gain increased awareness among local citizens, the County should create a brochure entitled: *Guide to Private Landowner Participation in Fauquier County's Greenway Network*. This brochure should be specific to the programs available for Fauquier County landowners, and should explain eligibility requirements for each program in a clear and easy-to-read format.

This brochure should be made available to land trusts, greenway advocates, and other citizens groups working on greenway projects, as well as through traditional sources within the County. (Note - descriptions for many of these programs already exist; this would consolidate them in one brochure, for ease of access.)

**A Note about Liability:**

*Private landowners who grant an easement for public access across their land are protected from liability by the Virginia Recreational Use Act. (§29.1-509 of the Code of Virginia)*

The county should also provide periodic updates to the development community regarding the greenway network. Developers and their engineering consultants should be made aware of changes in the County's review process with regards to protecting greenway lands, as well as the incentives that are available to them.

**ACTION 3: Form an alliance with school principals to revise current school policies to allow students to walk or bicycle to school.**

Unfortunately in years past, children due to various unavoidable restrictions, including distance, time, road conditions etc... were not able to easily walk or bike to school. With the growth of the county and the development of housing closer to school sites these opportunities have increased. As our society's lifestyle has become more sedentary, students have greater risk of many long term health issues due to inactive lifestyles. Allowing students who wish to walk or bike the opportunity to get exercise twice daily may provide a means of increasing student activity and improve long term health prospects. As the County continues to move toward improving access around schools for walking and bicycling, it will be important to revisit these policies, and to work to develop programs that support safer walking and driving behaviors. A good example of this is William C. Taylor Middle School, which has a direct connection to the Warrenton Branch Greenway. - Students could easily use the trail as a means to travel safely to and from school.

Chapter 6 recommends a new Safe Routes to School program in the County. Safe Routes to School programs are beneficial because they provide an impetus to improve walking conditions around schools, help to reduce the financial burden of student busing, provide another way



for children to get daily exercise, and reduce traffic volumes during the morning peak hours.

School systems throughout Virginia and the rest of the country are actively implementing Safe Routes to School programs with great success. It is important to note that the Safe Routes to School program does NOT encourage students to walk alone in unsafe locations - it provides a method for improving conditions, and encourages parents to walk with students to school.

**ACTION 4: Establish an institutional framework and oversight structure necessary to implement the recommendations of this Plan.**

This section addresses the need for continued oversight and coordination to insure successful implementation of this Plan. This Plan serves as a starting point to provide direction for improving walking and bicycling conditions in the region and to encourage local jurisdictions to perform further investigation into opportunities to construct multi-use greenways, bikeways and walkways in their specific localities.

A variety of agencies, boards and committees will each play a role in the oversight of future bicycle, pedestrian and greenway programs and projects. It is important that these bodies provide the appropriate level of oversight and do not overlap in their responsibilities. The responsibilities of each are described below:

- Agency staff (including all plan reviewers) - responsible for reviewing the *details* of all proposed projects, and for enforcing the regulations with regards to bicycle, pedestrian and trail provisions. Also responsible for identifying appropriate issues that should be brought before the BPGAC, Parks Board and Planning Commission.

Agency staff are also responsible for *quality control* of the system, that is, they are responsible for ensuring that multi-use trails are constructed and maintained in compliance with Parks and Recreation Standards. In this respect, they have a responsibility for inspecting trails that are built by developers for public use.

As the responsibilities of agency staff will be considerable (particularly the Parks and Recreation and Community Development Departments), it is recommended that a staff person be hired to be responsible for the program (see Action 4A below).

- Pedestrian, Bicycle and Greenway Advisory Committee (PBGAC) - responsible for advocating for the implementation of various aspects of the Plan, and for coordinating the activities of

individual jurisdictions. This group may be consulted regarding various details of development projects when staff need advice or assistance (see recommendation 4B below).

- Parks and Recreation Board - responsible for more global issues related to achieving the County's vision with regards to recreational facilities, such as locations of future recreation and park facilities, preservation of greenway corridors, and funding strategies for such projects.
- Planning Commission - as an advisory board to the Board of Supervisors, the Planning Commission's responsibilities include providing recommendations to the Board of Supervisors for special exceptions, rezonings, Comprehensive Plan amendments and on other related land development issues. As such, the Planning Commission may request assistance from the BPGAC on occasion regarding important pedestrian and bicycle issues, and will serve to advocate for pedestrian and bicycle facilities as part of its ongoing work. In addition, the Planning Commission will be responsible for implementing many of the code revisions identified in this Plan.

**Recommendation 4A: Establish a trail staff person in the Parks and Recreation Department to oversee the planning and design of proposed greenways and trails throughout the County, and to act as an advocate for such facilities during the development process.**

To achieve the recommendations of this Plan, much work will need to be done in the future. A staff person should be hired to assume the responsibilities of preparing funding grant proposals, overseeing the work of developers in establishing greenways, and coordinating among the various Service Districts, Towns and adjacent jurisdictions.

More specifically, the Trails Coordinator will be responsible for all aspects of trail development within the County, including (but not limited to) working with homeowners associations and developers on trail issues, reviewing trail design plans submitted by developers, working with VDOT to ensure that future roadways and maintenance activities account for the proposed trail network, working with other County and local government agencies to ensure connectivity across jurisdictional boundaries, and implementing the education and promotional programs recommended in this Plan.

**Recommendation 4B: Establish a county-wide committee responsible for coordinating the implementation of this Plan.**

Evidence from around the country shows that successful pedestrian and bicycle programs result from well-organized advocacy and inter-agency support. A Pedestrian, Bicycle and Greenway Advisory Committee (PBGAC) should be appointed by the Parks and Recreation Board and

Planning Commission. The purpose of the PBGAC will be to stimulate and coordinate the implementation of this Plan. The PBGAC should be comprised of agency staff, Town representatives, a law enforcement official and citizens who are involved in pedestrian, bicycle and trail issues in the County.

This group should provide guidance and recommendations to the Parks and Recreation Board, the Planning Commission, and local villages when needed. A key goal of this committee in the first year should be to provide assistance and support for revisions to subdivision ordinances, and roadway design standards (per Action 2).

**Recommendation 4C:** In the future, address planning needs for connections between the Service Districts.

Future revisions to this Plan will be necessary in order to facilitate a more in depth discussion regarding trail connections *between* the Service Districts. The exact nature of these connections (for example, whether they will be made along roadways or along stream corridors) is not known at this time. It will be important in the future to conduct a more detailed planning effort in these locations.

**ACTION 5:** Pursue additional grant sources and capital funding as necessary to supplement developer-financed trails (including those for wheeled users as well as horseback riders), bikeways, blueways and sidewalks.

Although the majority of the proposed network will be built through the development process, there will be gaps in the network in both the short term and long term that will need special funding in order to complete. It will be important to establish a mechanism by which to build these connections, otherwise the network will remain incomplete. There are a wide variety of grant sources available (see Chapter 7). The County should establish a yearly budget item for multi-use trail and sidewalk construction, in order to provide matching funds for future successful grants, and to complete special projects that are not grant-funded.

**ACTION 6:** Work with other partners to ensure that the trail network is adequately managed and maintained in the future.

**Recommendation 6A:** Establish guidelines for trail etiquette that reduce conflicts between users, and enable Fauquier County residents and visitors to share multi-use trails.

Almost all trails in the County will be multi-use, therefore it will be very important to establish a set of guidelines for trail etiquette that reduces conflicts and unsafe behaviors among the wide variety of users who must share the trails. Trail etiquette messages should be condensed

into short, easy to read signs that do not require the user to stop and read a long list of rules. This is particularly important on trails that have a high percentage of bicyclists, as well as those shared with horseback riders. The message should be “bikers yield to hikers, and bikers and hikers yield to horses.” Trail user groups such as the Fauquier Trails Coalition and horseback riding clubs should assist with these educational efforts.

**Recommendation 6B: Develop a maintenance and management program that ensures that facilities are maintained in good repair, both through routine seasonal maintenance and spot repairs.**

Since Fauquier County owns only portions of the trail network and does not manage the roadway system, ensuring good maintenance will require coordination with a variety of other parties. This includes VDOT, developers and property managers, Home Owners Associations (HOAs) and others. VDOT will maintain approved pedestrian and bicycle facilities located within the right-of-way of roadways that are under its operational control, except for snow and ice removal (as per VDOT policy of Dec. 19, 2002).

A first step in developing a maintenance program is to identify what tasks need to be undertaken and who is responsible for these tasks. Responsibility is largely determined by facility ownership. Tasks are largely divided between on-street bikeway maintenance tasks, “off-street” sidewalk and sidepath tasks, and multi-use trail maintenance tasks. Recommended maintenance practices include:

- Sweeping trails, bicycle lanes and paved shoulders regularly to remove debris;
- Repairing trail and roadway surfaces and sidewalks to ensure a continuous facility and smooth surface that is free of cracks, potholes, bumps and other physical problems;
- Careful repair of utility cuts to prevent rough surfaces for cyclists and sidewalk interruptions for pedestrians;
- Cutting back vegetation such as shrubbery, tree limbs and intrusive tree roots to prevent encroachment;
- Maintenance of pedestrian and bicycle signs, striping, and markings, especially replacement of signs that are damaged by vehicle crashes and other incidents;
- Maintenance of drainage facilities including catch basins and drainage grates;
- Snow removal; and
- Signal maintenance.

A maintenance schedule for the trail system is provided in Appendix C.

The NVRPA has a model maintenance and management program for the W&OD Trail, as well as a long history of working with trail support groups to augment the agency’s maintenance resources with those of

volunteers. Practices and procedures from this model should be studied and applied to future public trails in Fauquier County, and any publicly-owned pathway facilities that are added to the network by VDOT or developers.

The primary action recommended for maintenance and management is that the County identify a lead staff person and establish a system to address both regular and remedial inspection and maintenance of the on-road and off-road pedestrian and bicycle network. This staff person would be responsible for coordinating with trail volunteer groups for tasks that they can assist with. Once a system is established, a "Maintenance Action Request Form" could give citizens an easy means of reporting maintenance concerns on local trails and bikeways.

One method that other jurisdictions have used to maintain greenways is to establish a youth conservation corps that is responsible for performing a number of routine, light maintenance tasks. This can help to reduce the burden of maintenance on County staff, while also providing meaningful volunteer opportunities for local youth.

## **Conclusion**

In conclusion, the network and policy recommendations in this chapter are a critical step in achieving the vision of an interconnected network of greenways, bikeways and sidewalks throughout Fauquier County. The implementation of this network will require partnerships among local jurisdictions, agency staff, and citizens. The physical network, however, is only one aspect of accommodating and encouraging walking and bicycling in Fauquier County. Chapter 6 described a variety of other programs that will be needed in the future to support walking and bicycling.